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SUPPLEMENT "R" CANADIAN ELECTRICAL CODE PART I, 7TH EDITION.

Supplement "R" which includes editorial corrections to the 7th edition of the Code, and all changes approved, to the date of publication, by the Part I Committee on the Code for inclusion in the next edition of the Code is now available.

The rules in Supplement "R", and its adoption, were discussed with representatives of the industry at the Alberta Provincial Code Committee Meeting held on February 11th and 12th, 1959. Since it is desirable to limit the adoption of revisions to the regulations to once yearly, except in unusual situations, it was agreed that Supplement "R" should be adopted with an effective date of January 1st, 1960. When it is adopted the section on Mobile Home Courts will be revised to comply with the regulations for Mobile Home Courts which became effective in Alberta on January 1st, 1959.

Installations made in accordance with the revisions in Supplement "R" will now be accepted by the Provincial Inspection Branch.

The first edition of Supplement "R" is now available at this office and our District Electrical Inspection Offices at 25 cents each. When ordering copies of this article through the mail, your requests should be directed to this office along with the necessary remittance made payable to the Provincial Treasurer.

PROVISION FOR GROUNDING WHERE SURFACE FITTINGS ARE USED IN CONJUNCTION WITH BONDED NON METALLIC SHEATHED CABLE.

To comply with the rules contained in the 7th edition of the Canadian Electrical Code it is essential that non-metallic sheathed cable grounding conductors be brought into every non-metallic outlet box in such a manner that they can be connected to any fitting, or device, which may require grounding. In addition, where more than one grounding conductor enters an approved surface fitting such as a switch, outlet, or tap device of insulating material used without boxes with exposed cable installations, all these conductors shall be in good electrical contact with each other.

To meet the intent of the above it is considered necessary that all fittings and devices used with non-metallic sheathed cable installations be of such design that continuity of the grounding conductors may be maintained without difficulty. Only approved surface fittings that have sufficient space provided for the grounding conductors involved in the particular application shall be considered as acceptable.

MINIMUM SIZE OF SERVICE CONDUIT WHEN USED AS SERVICE MAST.

When the service conduit is used as the service mast it is essential that it meet certain minimum requirements in order that the completed installation will, without injury, support the service drop conductors during periods when the usual adverse ice loading conditions, etc. prevail.

Sections of service conduits intended to serve as a service mast must, in general, have a minimum of at least two inch internal diameter. When a service conduit having a two inch internal diameter is extended above a roof it must not, in any case, extend an unsupported distance of more than three feet. This three foot limitation may need to be reduced in instances where the service drop is excessively long, or employs conductors larger than normal.

In all cases where service conduits having an internal diameter of less than two inches are used for this purpose they must not extend unsupported above the roof surface except by special permission.

Further particulars regarding the interpretation of the applicable safety rules concerning the minimum vertical clearance that must be provided between the roof and the service drop conductors were contained in the January 1957 Quarterly Bulletin.

USE OF NEUTRAL CONDUCTOR FOR GROUNDING ELECTRIC RANGES, CLOTHES DRIERS AND SIMILAR APPLIANCES.

In view of the difficulty experienced, in the past, in providing a grounding medium other than the neutral conductor for electric ranges, driers and similar appliances, provisions were made for acceptance of bonding to the neutral for grounding of exposed non-current carrying metal parts.

However, with the introduction of non-metallic sheathed cables incorporating a grounding conductor for all installations, and the inclusion of grounding type appliance receptacles on ranges, the use of the neutral conductor for grounding will not be acceptable for installations undertaken after July 1st, 1959. Exceptions to this requirement will only be made where ranges, driers and similar equipment are installed where feeders not incorporating a grounding conductor were provided under the previous rules and in such cases bonding to the neutral will be permitted.

Where a range is to be grounded by a separate conductor, a No. 12 AWG conductor may be used if the rating of the overcurrent protection does not exceed 40 amps.

This is in accordance with Table 16 Supplement "R".

SERVICE HEAD LOCATION.

Numerous instances have been reported where the supply end of a service has been located less than 15 feet above the finished grade level and in such a way that the service drop conductors cannot be maintained at the required ground clearance.

Rule 6-010 of the 7th edition of the Canadian Electrical Code requires that the supply end of a consumer's service be located not less than 15 feet nor more than 30 feet above the sidewalk or grade level where practicable. In the case of low buildings where this 15 foot height is not obtainable the supply end of the consumer's service must be as high as practicable, but in no case less than 9 feet. In all such instances the supply end of the consumer's service must, in addition, be so installed that the service drop wires can be maintained at the required ground clearance.

In accordance with the regulations adopted under the Electrical Protection Act, service drop conductors of 0 to 750 volts must have a clearance of 14 feet provided over ground accessible to pedestrians only. Where such service conductors cross, or run along thoroughfares, or lanes, in urban districts, or along same in rural districts, a ground clearance of 18 feet must be provided.

In order to comply with the intent of the rules referred to above it is considered necessary that the ground clearances specified for service drop conductors be provided at a horizontal distance of not more than 10 feet from the building and thereafter maintained.

Where insulated pre-assembled multiple conductor cable assemblies are used for the service drop to the buildings it is not considered mandatory that the minimum ground clearances be provided over areas accessible to pedestrians only. Where this type of cable assembly is installed, installations having a minimum ground clearance of not less than 12 feet above ground accessible to pedestrians only may be considered as acceptable.

PROVINCIAL ELECTRICAL PROTECTION BRANCH APPOINTMENTS.

Following the resignation of Mr. I. G. Finlay, as Chief Electrical Inspector for this Province, the following appointments were announced by Mr. S.A.B. Kembry, Superintendent of Electrical & Gas Inspection Services.

Mr. G. W. Lawson, formerly Assistant Chief Electrical Inspector has been appointed Acting Chief Electrical Inspector.

Mr. E. G. Larson has been appointed to the position of Acting Assistant Chief Electrical Inspector.